

LIST OF CURRENT CLAIMS

1. (Currently Amended) A transducer, comprising a one-piece or multi-piece piezoceramic disk having two radial surfaces and a membrane formed of a material comprising an elastomer which attenuates sound vibrations, wherein one of the radial surfaces of the piezoceramic disk is directly attached to the membrane with a hard glue.

2. (Original) The transducer according to claim 1, in which the membrane is formed of a soft material.

3. (Original) The transducer according to claim 1, in which the membrane is formed of synthetic material.

4. (Original) The transducer according to claim 1, in which the membrane comprises a polymer.

Claim 5 (Canceled)

6. (Original) The transducer according to claim 1, in which the membrane comprises a polypropylene.

7. (Original) The transducer according to claim 1, in which the membrane comprises a composite material.

Claim 8 (Canceled)

9. (Original) The transducer according to claim 1, in which a layer of metal is provided on the membrane.

10. (Original) The transducer according to claim 1, in which the membrane is provided with one or more circumferential grooves.

11. (Original) The transducer according to claim 10, in which the membrane has two sides opposite to each other and the ceramic disk is attached to one side while the groove or grooves are provided in the other side.

12. (Original) The transducer according to claim 10, in which the groove or grooves have a depth of 90% of the thickness of the membrane.

13. (Previously Presented) The transducer according to claim 1, in which the membrane is provided with at least one circumferential passageway extending substantially through the entire thickness of the membrane, and the thus formed membrane parts are mutually connected by means of adhesive tape.

14. (Original) The transducer according to claim 1, in which the membrane has a circumferential edge, the transducer being connected at the circumferential edge of the membrane to a frame, a housing of a device or similar by means of a flexible glue.

B 15. (Previously Presented) The transducer according to claim 1, which is formed by a housing of a device made of synthetic material, onto which the piezoceramic disk is attached.

16. (Previously Presented) The transducer according to claim 15, in which an opening is provided in the wall of the housing, at the location of the piezoceramic disk.

17. (Original) The transducer according to claim 13, including a suspension frame formed of a material which attenuates sound vibrations.

18. (Original) The transducer according to claim 17, in which the suspension frame has an L-shaped cross-section.

19. (Previously Presented) The transducer according to claim 17, in which the suspension frame has a U-shaped cross-section.

Application No.: 09/901,635
Examiner: Suhan NI
Art Unit: 2643

20. (Original) The transducer according to claim 1, wherein a frequency filter, formed by a plate with round openings therein, is provided in front of the transducer.

B 21. (Currently Amended) The transducer according to claim 1, wherein the piezoceramic disk defines a circumferential shape different than ~~[[the]]~~ a circumferential shape of the membrane.

